Who We Are
University of New Hampshire

- Founded in 1866
- Main campus located in Durham, New Hampshire, USA
- 12,500+ undergraduate students, 2,500+ graduate students
• The UNH-IOL is a non-profit neutral, third-party laboratory dedicated to testing data networking technologies through industry collaboration.

• Since 2012, NVMe Org has collaborated with UNH-IOL to manage the Integrator’s List based Test Program on behalf of NVMe Organization
NVMe Plugfest #8

When:
Monday October 30, 2017 - Thursday November 2, 2017

Where:
21 Madbury Rd Suite 100
Durham, NH 03824 USA
• NVMe over Fabrics
• Test updates for NVMe PCIe SSDs
• Test updates for NVMe-MI
• Test Tool Updates
• Reporting Bugs with UNH-IOL tools
• How to Prepare
• Logistics
• Q&A
Glossary

- NVMe – Non-volatile memory express. Most commonly used to refer to NVMe over PCIe SSDs.
- NVMe-MI – Management Interface for NVMe SSDs
- NVMeoF – NVMe over Fabrics (RoCE V2 and Fibre Channel)
- RoCE – RDMA over Converged Ethernet
- RDMA – Remote Direct Memory Access
Agenda

- NVMe over Fabrics
- Test updates for NVMe PCIe SSDs
- Test updates for NVMe-MI
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- How to Prepare
- Logistics
- Q&A
1. NVMeoF Integrator’s List Requirements
2. NVMeoF Interop + Conformance Tests
3. NVMeoF Conformance Tools
4. NVMeoF Test Tool Walkthru
NVMeoF Integrator’s List will accept
• RoCE Initiators and Targets
• Ethernet Switches
• Fibre Channel Initiators and Targets, Switches

Requirements documented in NVMe Integrators List Policy Document v8.0
Requirements for Initiators
1. Pass NVMeoF Interop Tests with 2 Target Interop Partners

Requirements for Switches
1. Pass NVMeoF Interop Tests with 2 Target Interop Partners

Requirements for Targets
1. Pass NVMeoF Interop Tests with 2 Initiator Interop Partners
2. Pass NVMe Protocol Conformance ‘OF’ tests

2 Partners could be same HW with different OS/Driver.
Pass NVMeoF Interop Tests with 2 partners in a multi switch setup.

NVMeoF Interop Tests Summary:
1. Discover Target
2. Send Traffic
3. Link Pull
4. Power Up
UNH-IOL NVMeoF RoCE HW/SW Setup

Centos 7, Kernel 4.12
Mellanox ConnectX4 100G RNIC

Edgecore 7712 100G Switch Cumulus Linux

Edgecore 7712 100G Switch Cumulus Linux

DUT Substituted in at any position

Mellanox ConnectX4 100G RNIC

NVMeoF RoCE Target DUT
NVMeoF Interop Tests

UNH-IOL NVMeoF Fibre Channel HW/SW Setup

SUSE SLES 12

HPE StorFabric SN1600E 32GFC HBA

Brocade G620 32GFC (HPE Version)

Brocade G620 32GFC

NVMeoF FC Target DUT

HPE StorFabric SN1600E 32GFC HBA

DUT Substituted in at any position
NVMeoF Tests: NVMe Conformance Tests

- Documented in [NVMe Conformance Test Suite v8.0](#)
- Pass NVMe Protocol Conformance tests marked ‘OF’ (~60% of Tests)
- Currently verifies NVMe protocol only, no verification of Binding Spec
UNH-IOL IOL INTERACT PC Edition for FC and RoCE

Tool acts as NVMeoF Initiator, to exercise the NVMe protocol functionality on the Target.

Encourage members to download and run tool ahead of event.

Uses nvmecli toolbox
Test Tool Walkthru will show this setup
NVMeoF: Conformance Tools

IOL INTERACT PC Edition FC HW/SW Setup

- 
- 

SUSE SLES 12

HPE StorFabric SN1600E 32GFC HBA

Brocade G620 32GFC (HPE Version)

Brocade G620 32GFC

NVMeoF FC Target DUT
IOL INTERACT NVMeoF Test Tool Walkthru
OS: Centos 7, Kernel 4.12
RDMA NIC: Mellanox ConnectX4-LX
Tutorial: https://community.mellanox.com/docs/DOC-2504

Initiator Side

```
[root@fd124984 LDD_Scripts]$ lsmod | grep "nvme"
nvme                           28672 0  
nvme_rdma                      28672 0  
nvme_fabrics                   20480 1  nvme_rdma
nvme_core                      52248 3  nvme_fabrics,nvme_rdma,nvme
rdma_cm                        61440 2  nvme_rdma,rdma_u cm
ib_core                        237568 11  ib_cm,rdma_cm,ib_umad,nvme_rdma,ib_uverbs,ib_ipoib,iw_cm,mlx5_ib,ib_u cm,rdma_u cm,mlx4_ib
mlx_compat                     16384 18  ib_cm,rdma_cm,ib_umad,nvme_fabrics,ib_core,nvme_rdma,ib_uverbs,nvme,nvme_core,mlx4_en,ib_ipoib,mlx5_core,iw_cm,mlx5_ib,mlx4_core,ib_u cm,rdma_u cm,mlx4_ib
```

Target Side

```
[rdsnvm#openvpn-client15 ~]# lsmod | grep "nvme"
nvnet_rdma                     32768 1  
nvnet                           53248 13 nvnet_rdma
rdma_cm                        61440 2  rdma_u cm,nvnet_rdma
ib_core                        237568 11  ib_cm,rdma_cm,ib_umad,ib_uverbs,ib_ipoib,iw_cm,mlx5_ib,ib_u cm,rdma_u cm,nvnet_rdma,mlx4_ib
nvme                           28672 4  nvnet,nvnet_rdma
nvme_core                      53248 2  nvme
nvme_fabrics                   16384 18  ib_cm,rdma_cm,ib_umad,ib_core,ib_uverbs,nvnet,nvme,nvme_core,mlx4_en,ib_ipoib,mlx5_core,iw_cm,mlx5_ib,mlx4_core,ib_u cm,rdma_u cm,nvnet_rdma,mlx4_ib
```
Target Side Working Directory

```
[rdmanvme@openvpn-client15 nvmet]$ pwd
/sys/kernel/config/nvmet
```

```
[rdmanvme@openvpn-client15 nvmet]$ tree
.
├── hosts
├── ports
│   ├── 1
│       ├── addr_adrfam
│       ├── addr_traddr
│       ├── addr_treq
│       ├── addr_trsvcid
│       ├── addr_trtype
│       ├── referrals
│       └── subsystems
│           └── nvmet-rdma -> ../../../../../nvmet/subsystems/nvmet-rdma

subsystems
└── nvmet-rdma
    ├── allowed_hosts
    │   └── attr_allow_any_host
    └── namespaces
        └── 10
            ├── device_nguid
            ├── device_path
            ├── enable
            └── pci_device_path
```

Subsystem

NVMe Qualified Name

Namespace ID
Initiator Side Discovery

[root@d124064 ~]# nvme discover -t rdma -a 192.168.0.1 -s 4420

Discovery Log Number of Records 1, Generation counter 1
======Discovery Log Entry 0======
trtype: rdma
adrfam: ipv4
subtype: nvme subsystem
treq: not specified
portid: 1
trsvcid: 4420

subnqn: nvmet-rdma
traddr: 192.168.0.1

rdma_prertype: not specified
rdma_pqtypename: connected
rdma_cms: rdma-cm
rdma_pkey: 0x0000

Transport type
Address
IANA Default Port Number for NVMeoF
Subsystem NVMe Qualified Name
Initiator Side List, no targets shown, then Connect and List Targets

<table>
<thead>
<tr>
<th>Node</th>
<th>SN</th>
<th>Model</th>
<th>Namespace</th>
<th>Usage</th>
<th>Format</th>
<th>FW Rev</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

```
[root@d124064 LDD_Scripts]$ nvme list

[root@d124064 LDD_Scripts]$ nvme connect -t rdma -n nvmot-rdma -a 192.168.0.1 -s 4420
[root@d124064 LDD_Scripts]$ nvme list
```

```
[dev/nvme0n1] 2b0fc37e9b36ca08 Linux 10 400.09 GB / 400.09 GB 512 B + 0 B 4.12.4-1
```

[output truncated]
Run UNH-IOL INTERACT for RoCE Version 8.0a Test 1.1 Case 3

Test 1.1 - Case 3
Testing started at: Sep-21-2017_09-53-03
tnme command: sudo ./runLD.sh -test=1.1.3
-d=/dev/nvme0 -v 1.2
Number of Tests Passed: 1
Number of Tests Failed: 0
Number of Tests Skipped: 0
Number of Informative Tests: 0
Testing finished at: Sep-21-2017_09-53-03
Test Passed

----------End of Testing----------
Number of Tests Passed: 1
Number of Tests Failed: 0
Number of Tests Skipped: 0
Number of Informative Tests: 0
Testing finished at: Sep-21-2017_09-53-03
Test Passed

Full log output is contained in manage/LogFolder/
Testing performed on Sep-21-2017_09-53-03
Test Log from UNH-IOL INTERACT for RoCE Version 8.0a

Test 1.1 Case 3
Identify Command: Namespace List

```
--dump=./Logs
--postfail
-k
skiptest.cfg
--test=1.1.3
-d=/dev/nvme0
-v
1.2
Running test: 1.1.3
Running on device: /dev/nvme0
Setting device to /dev/nvme0

Finished getting/parsing controller data struct
[ 01:00:00]
Iteration SUMMARY
passed : 1
failed : 0
skipped : 0
informative : 0
total tests : 1
total groups : 1
Completed at Thu Sep 21 09:53:03 EDT 2017
Elapsed runtime (hh:mm:ss): 0:0:0
```

Namespace ID: 01:00:00
Test Log from
UNH-IOL INTERACT
for RoCE
Version 8.0a

Test 1.3 Case 1
Get Log Page Command:
Supported LIDs
Future Work:
1. Add NVMe conformance for NVMeoF Initiators
2. Expanding # of Interop Partners for IL Listing
3. Add NVMeoF conformance
4. Conformance test for Binding Specs
Agenda

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NVMe Conformance Test Requirements

- Test with both PC edition and LeCroy edition IOL INTERACT conformance tests
- If your product passes on both PC edition and LeCroy edition, *no further review is required*
- PC edition and LeCroy edition conformance testing each take approximately 30 minutes
- The latest v8.0 test suites, along with a redline version are available at: [https://www.iol.unh.edu/testing/storage/nvme/test-suites](https://www.iol.unh.edu/testing/storage/nvme/test-suites)
Tests with Status Changes:

Tests 2.3 and 2.4 Case 4 (NLB>MDTS) modified to be 'Mandatory if Supported', as these tests are only applicable if MDTS is not equal to 0.

Tests 2.3 and 2.4 Case 7 modified to be 'Mandatory if Supported', as these tests are only applicable if NN is not equal to 0xFFFFFFFF.

Test 1.3 Case 4 modified to be Mandatory if Supported depending on whether MDTS=0 or not. Test modified to expect “Invalid Field in Command” if MDTS conflicts with NUMD/NUMDU/NUMDL.

New Test Case 1.3 Case 10 is FYI.

Modified Test 2.1 to perform compares using a known sequence rather than the Identify Log Page data to simplify test implementation.

Clarified Test 2.9 Case 1 that both NABSN and NADSPF need to be set to zero for the test to applicable.

Modified Test 5.5 to make each condition tested into a separate test case. Most test procedures were not modified and so remain Mandatory, with the exception of Case 6 which had the procedure modified and is marked FYI. Clarified procedure to indicate that if no features are indicated as ‘Not Changeable’ then the test case does not apply.

Tests 2.5 Case 5, 2.7 Case 5, 3.4 Case 1, 7.3 Case 1, 1.4 Case 9 had status changed from FYI to Mandatory or Mandatory if Supported.

Tests 1.1 Case 4, 1.7 Case 1, 2.2 Case 3, 4, 5, 2.7 Case 9, 2.9 Case 2, 7.1 Case 2 and 7.2 had status changed from In Progress to FYI.
• No significant changes to Interop Tests
  – Read/Write + Boot with 5 systems
  – Hotplug if U.2 with 1 system

• Interop Read/Write VDBENCH Scripts shared on UNH-IOL Box Fileshare

• http://www.oracle.com/technetwork/server-storage/vdbench-downloads-1901681.html

• Interop testing has been automated to help save time during interop test blocks
• Interop testing will take approximately 90 minutes

• The latest v8.0 test suite available at:
  https://www.iol.unh.edu/testing/storage/nvme/test-suites
## Interop Systems

<table>
<thead>
<tr>
<th>Platform</th>
<th>OS</th>
<th>Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell PowerEdge R720</td>
<td>Win 2k12 Server R1 &amp; R2</td>
<td>Read/write</td>
</tr>
<tr>
<td>Dell PowerEdge R720</td>
<td>RHEL 6.5</td>
<td>Hot plug</td>
</tr>
<tr>
<td>ASUS X79 Deluxe LGA 2011</td>
<td>Ubuntu 16.04</td>
<td>Read/write</td>
</tr>
<tr>
<td>SUPERMICRO MBD-X10SAT-O ATX Server</td>
<td>RHEL 6.5</td>
<td>Read/write</td>
</tr>
<tr>
<td>SUPERMICRO MBD-X10SAT-O ATX Server</td>
<td>Windows 10</td>
<td>Read/write</td>
</tr>
<tr>
<td>ASRock Z97</td>
<td>Ubuntu 16.04</td>
<td>Boot</td>
</tr>
<tr>
<td>Gigabyte GA-1 H170</td>
<td>Ubuntu 16.04</td>
<td>Boot</td>
</tr>
<tr>
<td>Intel ‘Wildcat Pass’</td>
<td>Win2k16 Server</td>
<td>Read/write</td>
</tr>
<tr>
<td>Intel ‘Wildcat Pass’</td>
<td>CentOS</td>
<td>Read/write</td>
</tr>
</tbody>
</table>

[https://www.iol.unh.edu/testing/storage/nvme/equipment](https://www.iol.unh.edu/testing/storage/nvme/equipment)
Agenda

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- **Test updates for NVMe-MI**
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NVMe-MI Conformance Test Requirements

- Test performed using the Teledyne-LeCroy T-34
- Currently no NVMe-MI Interop Tests
- The latest v8.0 test suite, is available at: https://www.iol.unh.edu/testing/storage/nvme/test-suites
- NVMe and NVMe-MI Integrator’s Lists are Independent
Known Issue with Test 8.5

• Test performs a Controller Health Status Poll command, then verifies that DUT responds with a Controller Health Status Poll Response with all reserved bits set to 0. The current test implementation incorrectly treats the RENT field as reserved.
• Test Tool will incorrectly fail devices which implement NVMe-MI v1.0 ECN 003
• This ECN changed a value from being zeros based to not zeroes based, changing the value that the test tool needs to look for.
• ICC is aware of this and ready to provide waiver for DUTs that run into this problem.
• Please be aware of if you’re device has implemented NVMe-MI v1.0 ECN 003.
Agenda

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UNH-IOL NVMe INTERACT Test Tools

- PC Edition for PCIe released Sept 8, 2017
- Teledyne-LeCroy Edition for PCIe released August 28, 2017
- Version 8.0a or higher will be used at Plugfest #8
- Download today from UNH-IOL Box Fileshare and start testing
- Intended for PCIe-based SSD testing
NVMe Test Tool Updates

- PC Edition IOL-INTERACT v8.0
  - Releases in two parts and can be found on Box
  - The some tests re-architected to supports creating better/clearer tests logs
  - Both packages must be run to perform all the required tests so we highly recommend both packages being run.
  - We're working on integrating the packages together soon, which will be more convenient for you
  - This will not change any of the 'NVMe functionality' in those tests
IOL INTERACT PC Edition PCIe HW/SW Setup

UNH-IOL INTERACT PC EDITION
Ubuntu 16.04 LTS, Kernel XX.YY

PCIe

NVMe PCIe SSD DUT
• LeCroy Edition IOL-INTERACT V8.0

• GUI change - the ability to run multiple tests at one time enabled, and able to select all the tests by clicking on the IOL Logo in the wrapper. Also, alterations to how logs are stored.

• 5 new test cases supported (previously only available on PC edition):
  • 1.3 case 4 (NUMD/MDTS Conflict (MS, OF))
  • 1.3 case 5 (Get Error Information after Error (M, OF))
  • 1.4 case 6 (Create I/O Submission Queue Physically Contiguous (M))
  • 1.4 case 9 (Create I/O Completion Queue Invalid Queue Address Offset (M))
  • 1.4 case 10 (Create I/O Submission Queue Invalid Queue Address Offset (FYI))
NVMe: Conformance Tools

IOL INTERACT Teledyne-LeCroy Edition HW/SW Setup and NVMe-MI Conformance Setup

Windows 10 PC
Teledyne-LeCroy PETracer v8.60

Teledyne-LeCroy T-34 PCIe Analyzer Exerciser

NVMe PCIe SSD DUT

USB 3.0
## Conformance Test Tools

<table>
<thead>
<tr>
<th>NVMe</th>
<th>NVMe over Fabrics</th>
<th>NVMe-MI</th>
<th>NVMe</th>
<th>NVMe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used for Groups 1, 2, 3, 4, 5, 6, 7, 8, 9, 10</td>
<td>Used for separate NVMe over Fabrics test suite</td>
<td>Used for separate Conformance v8.0 NVMe-MI test suite</td>
<td>Used for Groups 1, 2, 3, 4, 5, 6, 10</td>
<td>Used for Group 7 and 9</td>
</tr>
<tr>
<td>Supports up to Ubuntu 16.04 LTS now.</td>
<td>Centos 7 with upstream Kernel 4.12</td>
<td>Requires PETracer v8.60 or higher</td>
<td>Requires PETracer v8.60 or higher</td>
<td>Requires SVF version 3.7.1.</td>
</tr>
</tbody>
</table>
Agenda

- NVMe over Fabrics ✓
- Test updates for NVMe PCIe SSDs ✓
- Test updates for NVMe-MI ✓
- Test Tool Updates ✓
- **Reporting Bugs with UNH-IOL tools**
- How to Prepare
- Logistics
- Q&A
Welcome, Happy Customer

### Active Memberships

<table>
<thead>
<tr>
<th>Consortium</th>
<th>Owner</th>
<th>Email</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVMe</td>
<td>Happy Customer</td>
<td><a href="mailto:happy@nvme.org">happy@nvme.org</a></td>
<td>Feb 2017 - Jan 2018</td>
</tr>
</tbody>
</table>

[All Memberships]

### UNH-IOL Contacts

<table>
<thead>
<tr>
<th>Consortium</th>
<th>Manager</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>NVMe</td>
<td>Kerry Munson</td>
<td><a href="mailto:kauchterfonie@iol.unh.edu">kauchterfonie@iol.unh.edu</a></td>
<td>+1-603-862-3749</td>
</tr>
<tr>
<td>Business</td>
<td>Kari Younsi</td>
<td><a href="mailto:kari.younsi@iol.unh.edu">kari.younsi@iol.unh.edu</a></td>
<td>+1-603-862-0696</td>
</tr>
<tr>
<td>Marketing</td>
<td>Mara Bernazzani</td>
<td><a href="mailto:mberazzani@iol.unh.edu">mberazzani@iol.unh.edu</a></td>
<td>+1-603-862-0901</td>
</tr>
</tbody>
</table>
Report an Issue or Feature Request

If you have any problems or suggestions about the usability and functionality of the myiOL site or one of our test tools, please let us know.

What tool is this report regarding?

NVMe (INTERACT) PC Edition

What environment did this occur in? (e.g. OS, browser, etc)

Please provide as much additional information as possible below.

Submit Report
Agenda

- NVMe over Fabrics ✓
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- Test updates for NVMe-MI ✓
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- Logistics
- Q&A
Be Prepared!

Download the latest tools and run them!

- Tools that we will use at the plugfest are available now
- Run them, find bugs, fix bugs
- Link to licensing agreement
  - [https://www.iol.unh.edu/solutions/test-tools/interact](https://www.iol.unh.edu/solutions/test-tools/interact)
- Link to UNH Box PC Edition IOL-INTERACT Software
  - [https://unh.box.com/s/cktgos25cjk6alclromuvqfn1lgebgyd](https://unh.box.com/s/cktgos25cjk6alclromuvqfn1lgebgyd)
- Link to UNH Box LeCroy Edition IOL-INTERACT Software
  - [https://unh.box.com/s/n3drj5qpmmm7maqjrahxw3ycovuy3p37g](https://unh.box.com/s/n3drj5qpmmm7maqjrahxw3ycovuy3p37g)
Bring 2+ Samples of each product

- Conformance tests will only require 1 sample
- Interop tests require that 2 samples be used simultaneously
- Please bring at least 2 samples of your product, this will facilitate interop testing
- Bring any necessary PCs, tools, cables that will be necessary to re-program or re-flash your device
Be Prepared!

- If you have a larger product (i.e. large PCIe dev board), please bring your own PCIe flex or riser cables
Be Prepared!

- UNH-IOL will have U.2/SFF-8639 to CEM adapters on hand
- If you have a **non CEM** form factor, please bring it, and also please bring at least 2 of your own adapters - this will facilitate interop testing
- Adapters available from **serialcables.com** and **teledynelecroy.com**
• NVMe over Fabrics ✓
• Test updates for NVMe PCIe SSDs ✓
• Test updates for NVMe-MI ✓
• Test Tool Updates ✓
• Reporting Bugs with UNH-IOL tools ✓
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• Q&A
Available!

- We have a soldering station in the Plugfest Room.
- Wired and wireless internet provided
- Power cords, mice, keyboards, monitors
No Photos

- No photos!
- Please respect confidentiality of your colleagues.
- All companies have agreed to UNH-IOL Usage Agreement
- UNH-IOL may take some ‘generic’ photos.
- If you would like a photo of your team, or your own equipment setup, please check with UNH-IOL staff first.
Travel

Visa Invitation Letter Contact: kerry.munson@iol.unh.edu

Shipping Address:
   NVMe Plugfest % Kerry Munson
   21 Madbury Rd Suite 100
   Durham, NH 03824
   ☏: 603-862-0090

Equipment must arrive by October 28th

Hotels, Travel, Parking Info:
   https://www.iol.unh.edu/about/visit

Airports: ✈
   MHT - Manchester Boston Regional Airport (1 hr)
   BOS - Boston Logan International Airport (1 hr 30 mins)

Train: 🚄
Amtrak - Downeaster
   Boston North Station > Durham-UNH
   http://www.amtrakdowneaster.com/
Parking code will be provided to registrants
UNH Campus Map:
Logistics

- Plugfest runs Monday - Thursday
- Doors open at 8AM, testing until 6PM
- Kickoff meeting Monday @ 11AM
- Light breakfast and lunch provided each day
- Device schedule will be made after registration closes
Registration

Register here:
https://www.iol.unh.edu/testing/storage/nvme/grouptest

Registration will close October 3, 2017

Registration Limits:
● At registration 2 products may be registered.
● All other products will be waitlisted, and accepted on a space-available basis.
● At registration you can register 4 engineers.
● Additional engineers will incur an additional fee.
Email: Kerry.Munson@iol.unh.edu
Web: www.iol.unh.edu

Q&A
Question: Have there been any NVMe-oF (RoCE or RoCEv2 or iWARP side) meetings yet? We have already had some Fibre Channel (FC) NVMe meetings.

Answer: The meetings covering this are with the NVMe Interop and Compliance Committee (ICC), these are every other Tuesday at 2PM Eastern Time. Next call is 9/26. You can get on the ICC email distribution via your account on nvmexpress.org.
Question: Will we be testing RoCE and RoCEv2 and iWARP

Answer: We are focused on RoCEv2 for this first NVMeoF plugfest
Question: Does the RoCE/RoCEv2/iWARP target adapter need to have an actual NVMe device behind it or can it use just virtual RAM driver in the host?

Answer: We (UNH-IOL) haven't tested out the virtual RAM functionality, although there’s no reason it shouldn’t work. We've only tested NVMeoF with an NVMe SSD behind the target adapter. I would recommend bringing an NVMe SSD that you're familiar with if you're intending to test an NVMeoF Target.
Q&A

Question: For both FC and RDMA, how long does it take to run the test suite?

Answer: The conformance tests can be run usually in about 30 minutes, but we're planning to allot 60 minutes to conformance testing. Interop testing usually takes about 90 minutes"
Question: How come the FCIA is running their own meetings yet the RoCE (Ethernet) side is part of the NVMe meetings?

Answer: It’s not entirely accurate to say the RoCE side is part of the Ethernet meetings and FC is not. The NVMeoF Interop tests are designed to be 'transport agnostic', in that they should be implemented and performed similarly for both FC and RoCE. FCIA is having meetings for plugfest testing that will likely be a deeper dive into FC testing (beyond just NVMeoF). Similarly IBTA (Infiniband Trade Association) will be having events focused on RoCE conformance and interop, again beyond just NVMe. Certainly we'd like input from both FC and RoCE product experts on the NVMe calls. The primary goal for the NVMe side is to test out NVMe protocol over the Fabric transport for inclusion in the NVMeoF Integrators List, without diving into testing the respective Fabric transport.
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Q&A

Question: PC edition 8.0 test case has been split to two packages, original and LDD folder. At plugfest will tests still be splitted into two packages and test them one by one?

Answer: For v8.0 we’ve implemented the tests using 2 different NVMe drivers to enable further test functionality. We’re working on integrating these into a single package. We recommend that you download and run both, as each one runs unique tests.